DESIGN APPROACH REVIEW (DAR) CHECKLIST

Title:

Developer: **Phone:**

Development Task Lead: **Phone:**

Customer/Requirement Contact: **Phone:**

Narrative Description:

Legend

RED -- sections to be filled in by task lead, OS, PWG, SwEG, or data manager
BLUE -- sections to be filled in by developer prior to Design Approach Review (DAR)
ORANGE -- sections to be filled in after prototype complete (staged at development organization)
GREEN -- sections to be filled in by integration/installation
VIOLET -- Testing/Documentation/CM sections to be filled in after prototype
BLACK -- Developer to provide initial recommendation. OS, SST, SET, SWEG, PWG, NGIT to provide decision.

Question	Responsible (Suggested person(s) to fill in information)	Response
I Requirement Assessment		
1.RWP number(s) addressed by this DAR. If RPU, state "RPU"	Task Lead	
I.2 RWP sub-requirement number(s) addressed by this DAR. If I.1 is RPU state "NA"	Task Lead	
II Design/Architectural Assessment		
II.1 List names of new persistent processes if any. If none, state "NA"	Developer	
II.2 List names of existing persistent processes	Developer	

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that will require mods if any. If none, state "NA"		
II.3 Will design include new fork/exec calls, system calls, or threads? If so, list type; also identify process(es) in II.1 and/or II.2 performing such activity. If no such calls will be made state "NA" *(add info on stl calls)*	Developer	
II.4 If item will involve new processes, describe how processes will communicate (e.g., sockets, pipes, signals). If no new multi-processing involved state "NA"	Developer	
II.5 List existing databases to be read from. If none, state "NA"	Developer	
II.6 List existing databases to be written to. If none, state "NA"	Developer	
II.7 List proposed modifications to the format of any existing databases. If none, state "NA"	Developer	
II.8 List any new databases anticipated being created and their proposed type (Informix, UNIX file). If none, state "NA"	Developer	
II.9 List all languages envisioned being used	Developer	
II.10 Will any new COTS/freeware packages/OS patches be required (Y/N/unsure)?	Developer (Initial recommendation) SWEG (final decision)	
II.11 Will new versions of existing COTS/freeware be required (Y/N/unsure)?	Developer (Initial recommendation) SWEG (final decision)	

Question	Responsible (Suggested person(s) to fill in information)	Response
II.12 List any AWIPS system APIs/CLIs anticipated being used (e.g. textdb, distributeProduct, handleOUP, transferNWR, ..) If none, state "NA"	Developer	
II.13 Describe any *new* AWIPS system APIs/CLIs desired but not currently provided. If none desired, state "NA"	Developer	
II.14 Describe any *modifications* to existing AWIPS system APIs/CLIs desired. If none, state "NA"	Developer	
II.15 Mark (Y/N) any planned use of the following AWIPS services: NotificationServer TextNotificationServer Informix triggers Informix (general) MHSserver DataController CommsRouter any core system Decoders (identify which)	Developer	
II.16 List hosts where all new processes are expected to run (AS, DS, WS).	Developer (Initial recommendation) SET, PWG (final decision)	
II.17 Will item make use of any significant scientific algorithms (Y/N/unknown)? If Y, describe	Developer	

Question	Responsible (Suggested person(s) to fill in information)	Response
II.18 If scientific algorithms will be used, do they already exist (Y/N/unknown)? If Y describe.	Developer	
III Operability		
III.1 Will a new user interface be implemented (Y/N)?	Developer (Initial recommendation) OS, UIWG (final decision)	
III.2 Will an existing user interface be modified (Y/N)?	Developer (Initial recommendation) OS, UIWG (final decision)	
III.3 Describe anticipated operational use of capability (e.g. severe weather usage)	OS	
IV Application Integration and installation		
IV.1 Are any changes to national data sets anticipated (Y/N/unknown)?	Developer, Fran Curnow	
IV.2 Will any new metadata files be required (Y/N/unknown)?	Development Organization's Integration	
IV.3 If item will involve new metadata files will they be site-configurable (Y/N/unknown)?	Development Organization's Integration	
IV.4 If item will involve new metadata files or national data sets files, will the sites be able to merge any existing customizations into the new files? (Y/N/unknown) If Y, will this require re-localization (Y/N/unknown)? If Y for re-localization, please list localization options.	Development Organization's Integration	

Question	Responsible (Suggested person(s) to fill in information)	Response
IV.5 Will localization be required (Y/N/unknown) If Y, list localization options.	Move to Application Integration	
IV.6 Are any changes to existing site-modifiable metadata files anticipated (Y/N/unknown)?	Development Organization's integration	
IV.7 Are any changes to runtime setup files (.rhosts, .environs, etc.) anticipated (Y/N/unknown)?	Development Organization's integration	
IV.8 Are there any new exes/scripts/data/config files (Y/N/unknown)? If Y, list the file location (directory, host) and their permissions.	Development Organization's integration	
IV.9 Will the exes/scripts/data/config files replace the existing files (Y/N/unknown)? If Y, will the old files need to be converted? If Y, is it backward compatible?	Development Organization's integration	
IV.10 Is any usage anticipated (Y/N/unknown)? If Y, list times of day if known	Development Organization's integration	
IV.11 Are all "monitor" pages updated? (Y,N,unknown)	Development Organization's integration	
IV.12 Are all start/stop scripts updated? (Y,N,unknown)	Development Organization's integration	
IV.13 Will any new runtime disk partitions/directories be required (Y/N/unknown)? If Y, provide list.	Developer (initial recommendation), SEC/SET/PWG (decision)	
IV.14 Have the appropriate mkdirs and purge scripts been modified?	Development Organization's integration	

Question	Responsible (Suggested person(s) to fill in information)	Response
IV.15 Will there be data base changes? (Y/N/unknown)? If Y: - Is a conversion script necessary? - Will there be enough disk space at the site to backup, convert, and reload the data base? - How long will this process take? - Will ingest need to be down for the entire process?	Developer (initial recommendation), SEC/SET/PWG (decision)	
V. System Integration		
V.1 Will any "core" runtime system services require changes; e.g., /etc/services, Informix parameters, operating system parameters, patches (Y/N/unknown)? If Y, list	Developer (initial recommendation), SWEG/SET (decision)	
V.2 Will the functionality get installed at all site types (WFO/RFC/OCONUS)? (Y/N/unknown)? If N, are all site type-specific files available (acq_parms, menus, etc.)?	Developer, OS, SST	
V.3 Are there any new hardware or interface requirements (e.g., R5.0 requires DS disk upgrade)? (Y/N/unknown)? If Y, can the install scripts verify the existence of the hardware or interface before continuing with the install?	Developer (initial recommendation), PWG, SET, NGIT (decision)	

Question	Responsible (Suggested person(s) to fill in information)	Response
V.4 Are there changes required to dtwmrc or other environs files? (Y,N,unknown) If Y, list the changes	Developer (initial recommendation), SWEG, SET, NGIT: (decision)	
V.5 Should the function be available when fail over? (Y,N,unknown)	Developer (initial recommendation), SWEG, SET, OS: (decision)	
V.6 Does a previous version of the function need to be installed prior to this version?	Development Organization's integration	
V.7 Are there any old files/data that need to be removed from the site? (Y, N/Unknown) If Y, is removing these files optional or will the system be unstable?	Development Organization's integration	
V.8 Any dependencies or order that we need to follow during installation and integration?		
VI. Performance		
VI.1 Will disk I/O be performed (Y/N/unknown)?	Developer	
VI.2 Will remote system calls (e.g., rcp, rsh, etc.) be used (Y/N/unknown)? If Y, list	Developer	
VI.3 Is heavy operational use of this item expected at any time (Y/N/unknown)? If Y, describe conditions	OS	
VI.4 Are there any new NFS access? Any impact on performance?	Developer (initial recommendation), PWG, SWEG, SET (decision)	

Question	Responsible (Suggested person(s) to fill in information)	Response
VI.5 If there are new database access, any impact on performance?	Developer (initial recommendation), PWG, SWEG, SET (decision)	
VI.6 Are there any new data acquisition? Any impact on performance? Any impact on disk space?	Developer (initial recommendation), PWG, SWEG, SET (decision)	
VI.7 Are there any new WAN access? Any impact on performance?	Developer (initial recommendation), PWG, SWEG, SET (decision)	
VI.8 Will any performance impact require any modification to thresholds monitored by procMon or IT/O alarms?	PWG, NGIT	
VI.9. For all the new items in V.4 - V.7, has the appropriate parms file been modified so the function can be monitored by MeasureWare and glancePlus?	Developer (initial recommendation), PWG, SWEG, SET, NGIT (decision)	
VII Hardware/Resource Usage Design		
VII.1 Is any new hardware required (Y/N/unknown)? If Y, list	Developer (initial recommendation), PWG, SET (decision)	
VII.2 Are any modifications to existing hardware anticipated (Y/N/unknown)? If Y, describe	Developer (initial recommendation), PWG, SWEG, SET, NGIT (decision)	
VII.3 Will additional disk space be required (Y/N/unknown)? If Y, provide estimate of	SEC/SET	

Question	Responsible (Suggested person(s) to fill in information)	Response
amount		
VII.4 Will use of Omniback/tape drive be required (Y/N/unknown)?	Developer (initial recommendation), OS (decision)	
VII.5 If WAN use is expected, is level of usage known - e.g., frequency and times of use, amount of data, etc. (Y/N/unknown)? If Y, provide details	Developer (initial recommendation), SET (decision)	
VII.6 Is SBN use expected (Y/N/unknown)?	Developer (initial recommendation), SET (decision)	
VII.7 If SBN use expected is level of usage known - e.g., frequency and times of use, amount of data, etc. (Y/N/unknown)? If Y, provide details	Developer (initial recommendation), SET (decision)	
VII.8 Is any use of async mux anticipated (Y/N/unknown)?	Developer (initial recommendation), SET (decision)	
VII.9 Is any use of LDAD xyplex server or LDAD modems anticipated (Y/N/unknown)?	Developer (initial recommendation), SET (decision)	
VII.10 Is any use of AWIPS xyplex server or AWIPS modems anticipated (Y/N/unknown)?	Developer (initial recommendation), SET (decision)	
VII.11 Will this item eliminate existing access to any hardware components, such as modems, async mux, etc. (Y/N/unknown)?	Developer (initial recommendation), SET (decision)	
VIII External Interfaces		

Question	Responsible (Suggested person(s) to fill in information)	Response
VIII.1 List name(s) of all external interfaces this item will directly contend with; do **not** list interfaces for which an AWIPS-provided API/CLI exists, such as distributeProduct, transferNWR). If none, state "NA"	Developer/Ext interface focal point (such as Mike Istok with radar)/SEC Data Manager	
VIII.2 For every external interface listed in III.1 does a formal ICD exist (Y.N)?	Ext interface focal point/SEC Data Manager	
VIII.3 For every formal ICD listed in III.2, is the ICD sufficient (Y/N)? If "N" explain	Ext interface focal point/SEC Data Manager	
IX General Design Assessment *(Decide at Design Approach Review)*		
IX.1 Would prototyping this item, or any portion of it, be a valuable exercise (Y/N)? If "Y", provide details		
IX.2 Do you foresee any portion of this item being useful as a system-wide or application-wide generalized function (Y/N)? If "Y", provide details		
X Responsible Individuals		
X.1 Name of main developer	Task lead	
X.2 Name of installation focal point	Task lead/OPS contact (Sanford Garrard)	
X.3 Name of performance focal point	Task lead/PWG contact (Tim Hopkins)	
X.4 Name of documentation focal point	Task lead/SEC contact (Roger Shriver)	
X.5 Name of individual who will validate statement of the requirement	OS	
X.6 Name of individual who will be available throughout the life-cycle of the development and testing to answer operational and functional questions about the item	OS	

Question	Responsible (Suggested person(s) to fill in information)	Response
X.7 Name of integration tester	NGIT	
XI Documentation		
XI.1 Will SMM entry/mod be required (Y/N/unknown)? If Y: - State "new" or "mod" - What sections will change?	Development Organization's doc/SEC contact	
XI.2 Will Users Manual entry/mod be required (Y/N/unknown)? If Y: - State "new" or "mod" - What sections will change?	Development Organization's doc/OS contact	
XI.3 Will AIFM entry/mod be required (Y/N/unknown)? If Y: - State "new" or "mod" - What sections will change?	(don't know what this is)	
XI.4 What other documents will be delivered (e.g., SLDFDs, DEDs, etc.)?	Developer/Task lead	
XI.5. Is soft copy in PDF, WP, or HTML? If HTML, please provide URL.	(should be a standard html site)	

Question	Responsible (Suggested person(s) to fill in information)	Response
XII Testing Assessment		
XII.1 Is any special test equipment required for CUT (Y/N/unknown)?	Developer (initial recommendation), SWEG (decision)	
XII.2 Will real data sets be required and available for CUT (Y/N/unknown)?	Developer, SEC Data manager	
XII.3 Will access to field personnel be required for CUT (Y/N/unknown)?	Developer, OS	
XII.4 Is any special test equipment required for integration testing (Y/N/unknown)?	Developer/Development integration group (initial recommendation), SWEG, NGIT (decision)	
XII.5 Will real data sets be available for integration testing (Y/N/unknown)?	SEC Data manager	
XII.6 Will access to field personnel be required for integration testing (Y/N/unknown)?	NGIT, OS	
XII.7 Will this item need to be alpha tested (Y/N/unknown)?	Task lead, ATAN point of contact (Oanh Nguyen)	
XII.8 Are any test procedures available? (Y/N) If N, how was this function unit tested?	Developer/Development Organization's test staff	
XIII CM		
XIII.1 Are any new PVCS items required? (Y,N,unknown) If Y, provide the list of items.	Developer, Development Organization's CM staff	
XIII.2 Has the pcmsMakefile and dependency file been updated prior to CM build? (Y,N)	Developer, Development Organization' s CM staff	

Question	Responsible (Suggested person(s) to fill in information)	Response
XIII.3 For any new items, has the developer coordinated with CM to identify how/ where the new objects get released? (Y,N)	Developer, Development Organization's CM staff	
XIII.4 Are there any special compiler flags/ options needed for building? (Y,N,unknown) If Y, list the flags/options	Developer, Development Organization's CM staff	
XIV Schedule		
XIV.1 Target date for HLDR	Task lead	
XIV.2 Target date for completion of prototype (if not applicable state "NA")	Task lead	
XIV.3 Decision date for completing scientific algorithms (if not applicable state "NA")	Task lead	
XIV.4 Target date for UIWG presentation (if not applicable state "NA")	Task lead, OS	
XIV.5 When will documentation in section X. above be delivered to NGIT (date)?	Task lead	
XIV.6 Other milestone dates (if none, state "NA")	Task lead	
XIV.7 Target date for software check-in	Task lead	
XIV.8 Will any special information be needed for the HLDR (Y/N/unknown)? If Y, describe	Task lead	